

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

cf. form PCT/ISA/220

Date of mailing
(day/month/year) cf. form PCT/ISA/210 (page 2)

Applicant's or agent's file reference
cf. form PCT/ISA/220

FOR FURTHER ACTION

See paragraph 2 below

International application No.
PCT/DE2004/001289

International filing date (day/month/year)
06/19/2004

Priority date (day/month/year)
07/30/2003

International Patent Classification (IPC) or both national classification and IPC
F02M51/06, F02M61/16

Applicant

ROBERT BOSCH GMBH

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/

Authorized officer

Boye, M

Facsimile No.

Telephone No.

EU 322 948 801 US

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/DE2004/001289

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/DE2004/001289

Box No. II Priority

1. ☒ The following document has not yet been furnished:

☒ copy of the earlier application whose priority has been claimed (Rules 43*bis*.1 and 66.7(a)).

☐ translation of the earlier application whose priority has been claimed (Rules 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Boye, M

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/DE2004/001289

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	6,8	YES
	Claims	1-5,7	NO
Inventive step (IS)	Claims	6,8	YES
	Claims	1-5,7	NO
Industrial applicability (IA)	Claims	1-8	YES
	Claims		NO

2. Citations and explanations:

WRITTEN OPINION OF THE
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International application No.
PCT/DE2004/001289

Box No. VI Certain documents cited

1. Certain published documents (Rules 43bis.1 and 70.10)

Application No.
Patent No.

Publication date
(day/month/year)

Filing date
(day/month/year)

Priority date (valid claim)
(day/month/year)

2. Non-written disclosures (Rules 43bis.1 and 70.9)

Kind of non-written disclosure

Date of non-written disclosure
(day/month/year)

Date of written disclosure
referring to non-written disclosure
(day/month/year)

cf. Form 210

IAP20 Rec'd PCT/PTO 09 JAN 2006

WRITTEN REPORT OF THE
INTERNATIONAL SEARCH OFFICE (SUPPLEMENTARY PAGE)

International File No. PCT/DE2004/001289

Reference is made to the following documents:

- D1: US-A-5,516,424 (STROHSCHIEIN HEINRICH) May 14, 1996
(1996-05-14)
- D2: US-A-5,356,079 (RAHBAR MEHRAN K) October 18, 1994
(1994-10-18)
- D3: US 2003/155447 A1 (REITER FERDINAND) August 21, 2003
(2003-08-21)

Re. Section V

**Substantiated Determination Regarding Novelty, Inventive
Activity, and Industrial Applicability; Documents and
Explanations in Support of this Determination**

1. Document D1 is considered the most proximate related art with respect to the subject matter of Claim 1. It describes (cf. Abstract, Fg. 1,2) (the references in parenthesis refer to this document) a fuel injector for fuel injection systems of internal combustion engines, having a solenoid coil (1), a tubular support (2) acting as inner pole of the solenoid coil (1), and a filter element (61), the filter element (61) being affixed at an outer contour of the tubular support (2) of the fuel injector.

The present application therefore does not satisfy the requirements of Article 33(1) PCT, because the subject matter of Claim 1 is not novel within the meaning of Article 33 (2) PCT.

2. The dependent Claims 2-5,7 do not include any features that, in combination with the features of any claim to

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which they relate, satisfy the requirements of the PCT with regard to novelty and inventive activity:

- D1,D3 describe a groove at the outer contour (**Claim 2**);
- The production of grooves by machine cutting or a structural steel constitute related art (**Claim 3**).
- The combination of D1 and D2 describes a shoulder, downstream from the groove, at which the filter element is supported (**Claims 4,5**);
- cup-shaped filter made from cloth material with a fiber glass plastic extrusion coat are known from the related art (**Claim 7**).

3. The combination of features contained in the dependent claim 6 is neither known from the present related art nor made obvious by it. 3.1 The applicant is advised to formulate a new independent Claim 1 which also incorporates the technical features of Claim 6 so as to arrive at a Claim 1 that is probably able to be granted.
- 3.2 The independent method Claim 8 includes the technical features of Claim 6 and is therefore considered novel and inventive.